REMARKS

Claims 20, 22-24 and 29-32 are pending in this application. By this Amendment, claims 20 and 22-24 are amended. Claims 29-32 are added. The claim amendments and added claims introduce no new matter. The claim amendments are supported by Applicants' disclosure at least at paragraphs [0027] and [0028], or are otherwise made for consistency with the amendments to the independent claims. Added claim 29 is supported by Applicants' disclosure at least at paragraphs [0022] and [0025], and in Fig. 1, as originally filed. Added dependent claims 30-32 are supported at least by Figs. 3-7, and their accompanying descriptions, and at least paragraphs [0027] - [0029]. No new matter is added. Claims 15, 17-19, 21 and 25-28 are canceled without prejudice to, or disclaimer of, the subject matter recited in those claims. Reconsideration of the application based on the above amendments and the following remarks is respectfully requested.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Lithgow in the August 27, 2010 telephone interview. Applicants' separate record of the substance of the telephone interview is discussed below.

The Office Action, in paragraph 1, makes final the Restriction Requirement. The non-elected claims are canceled.

The Office Action, in paragraph 3, rejects claims 20-24 under 35 U.S.C. §102(b) as being anticipated by any one of U.S. Patent No. 4,762,581 to Stancliffe, U.S. Patent No. 2,607,104 to Foster, JP-A-02-258249 (hereinafter "JP '249"), JP-A-08-226044 (hereinafter "JP '044"), JP-A-2004-052188 (hereinafter "JP '188") or GB 851 192 (hereinafter "GB '192"). These rejections are respectfully traversed.

In rejecting Applicants' claims, the Office Action largely paraphrases the claim language. It does not appear that the Office Action takes into account the details of all of the

separate and positively recited claim features. This is clearly improper. Taken to its ultimate extent, the Office Action largely dismisses the substance of Applicants' claims by broadly paraphrasing the claim language and applying references, many of which cannot even be broadly interpreted as teaching solid-liquid filtration cloth, as that term would be understood by one of skill in the art. It is well settled that "[t]o anticipate, every element and limitation of the claimed invention must be found in a single prior art reference, arranged as in the claim." *Brown v. 3M*, 265 F.3d 1349, 1351 (Fed. Cir. 2001), *cert. denied*, 122 S. Ct. 1436 (2002) (emphasis added). Because the unmodified teachings of none of the these references identically disclose or describes the combinations of all the features positively recited in the pending claims, a rejection of the pending claims over any of these references under 35 U.S.C. §102(b) is improper.

Additionally, it is a long settled tenet of claim construction that "[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). A claim construction that renders any particular term positively recited in a pending claim meaningless is disfavored. *Power Mosfet Teches, L.L.C. v. Siemens AG,* 378 F.3d 1396, 1410 (Fed. Cir. 2004). In broadly paraphrasing the combinations of all of the features positively recited in Applicants' claims, the Office Action cannot have properly taken into account all words in the claim as is required by the cited standards among others.

The above being stated, and without conceding the appropriateness of any of the rejections, which Applicants do not believe meet the applicable standards, the pending claims are clarified to varyingly recite that the first outer surface and the second outer surface are of "an integrally woven structure." As was discussed with Examiner Lithgow during the August 27 telephone interview, Applicants believe that this amendment clearly distinguishes the subject matter of the pending claims over any, even broad, interpretation of any of the

currently-applied references. For completeness, the individual applied references will be discussed briefly below.

Stancliffe teaches a plastic mesh for geotechnical use such as for soil retention. Applicants' representative discussed with the Examiner that such a plastic mesh is not suitable for solid-liquid filtration at least based on the mesh pitch for the outermost corrugated, non-shrink layer (2), which is disclosed as 5 to 11 mm. Based on this disclosure alone, one of ordinary skill in the art of solid-liquid filtration would understand that this reference is not applicable to that field. In response to Applicants' representative's input in this regard, Examiner Lithgow, during the telephone interview, asserted that he can broadly construe the term solid-liquid filtration to be virtually any mesh structure that may permit the passage of liquid while holding back the passage of any solid, regardless of size. Applicants respectfully submit that this is an overly broad construction of the term as it is used in the pending claims, and as such a term would be understood by those of ordinary skill in the art. As evidence of this, Applicants attach excerpts from "Solid/Liquid Separation Technology" by Derek B. Purchas (1981). It is clear that the term "solid-liquid filtration cloth," as that term is disclosed in this application and recited in the pending claims, has a specific meaning in the relevant art. As such, it is respectfully submitted that Stancliffe is not applicable to the subject matter of the pending claims.

Foster discloses a corrugated insulating fabric material to be used in arctic clothing. *See, e.g.,* col. 1, lines 13-44. At col. 3, lines 46 and 47, Foster discusses that the top and bottom layer of fabric are formed of ordinary cotton yarns. Additionally, at col. 5, lines 23-30, Foster discloses that it is desirable to cover the fabric with latex or similar coating, which would render such a fabric impermeable, and therefore unsuitable for filtration of any kind. As such, one of ordinary skill in the art would clearly recognize that Foster discloses a fabric that is unsuitable for solid-liquid filtration.

JP '044 discloses a three-dimensional structure cloth having continuous cylindrical forms and double fabric portions between the cylindrical portions. Because of the cylindrical portions, both sides of the cloth in JP '044 are always corrugated. As such, JP '044 does not teach, nor would it otherwise have rendered obvious, the subject matter of, for example, claim 20 when all of the features, and particularly the feature of a second surface being substantially even, are properly construed and taken into account. Additionally, as with the other above-described references, JP '044 would not be recognized by one of ordinary skill in the art as disclosing a solid-liquid filtration cloth having a suitable permeability.

JP '188 discloses a filter cloth having an even upper layer that is the surface layer of the cloth. Particularly, JP '188 points out that the cloth provides excellent surface smoothness. As such, JP '188 cannot reasonably be considered to teach, or otherwise to have rendered obvious, a first outer layer including corrugations.

JP '249 teaches a multi-layer cloth having a pre-fabricated padding layer to which, in a separate assembling phase, an upper layer is attached. As such, JP '249 neither teaches, nor would it otherwise have rendered obvious, a feature in which the first outer surface and the second outer surface are of "an integrally woven structure," as is recited, for example, in independent claim 20. In JP '249, superimposed fabric layers are fixed together by means of a knitting machine wherein looped yarns are used to attach the outer layers together.

GB '192 discloses a blister fabric having buckled areas of blisters (10) and flat areas (11) between the blisters. Therefore, in GB '192, an entire upper surface of the fabric is not corrugated, but rather also includes flat portions. As such, GB '192 cannot reasonably be considered to teach, or otherwise to have suggested, the subject matter of the pending claims.

Applicants' representative discussed the broad interpretation and application of the applied references with Examiner Lithgow during the August 27 telephone interview. Examiner Lithgow indicated his belief that the claims were very broad, and therefore subject

to broad construction, and otherwise of broad application of woven cloth references. Applicants' representative traversed the Examiner's application of the currently-applied references to the subject matter of the pending claims for the reasons set forth above regarding construction of the claims and broadest "reasonable" interpretation of the references.

For the reasons set forth above, none of the currently-applied references can reasonably be considered to teach, or otherwise to have rendered obvious, the combinations of all of the specifically-recited structural features of, for example, independent claim 20. As such, claim 20, and the claims depending therefrom, are allowable over each of the currently-applied references, taken alone, or in any varying combination.

Accordingly, reconsideration and withdrawal of the rejection of claims 20 and 22-24 under 35 U.S.C. §102(b) as being taught by any of the currently-applied references are respectfully requested.

Claims 29-32 are also allowable over the currently-applied references for reasons similar to those set forth above, as well as for the additionally patentable features that each one of these claims recites.

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 20 and 22-24, and consideration and allowance of claims 29-32, are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the telephone number set forth below.

Respectfully submitted,

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Attachment:
Excerpts from "Solid/Liquid Separation Technology"

JAO:DAT/cfr

Date: September 3, 2010

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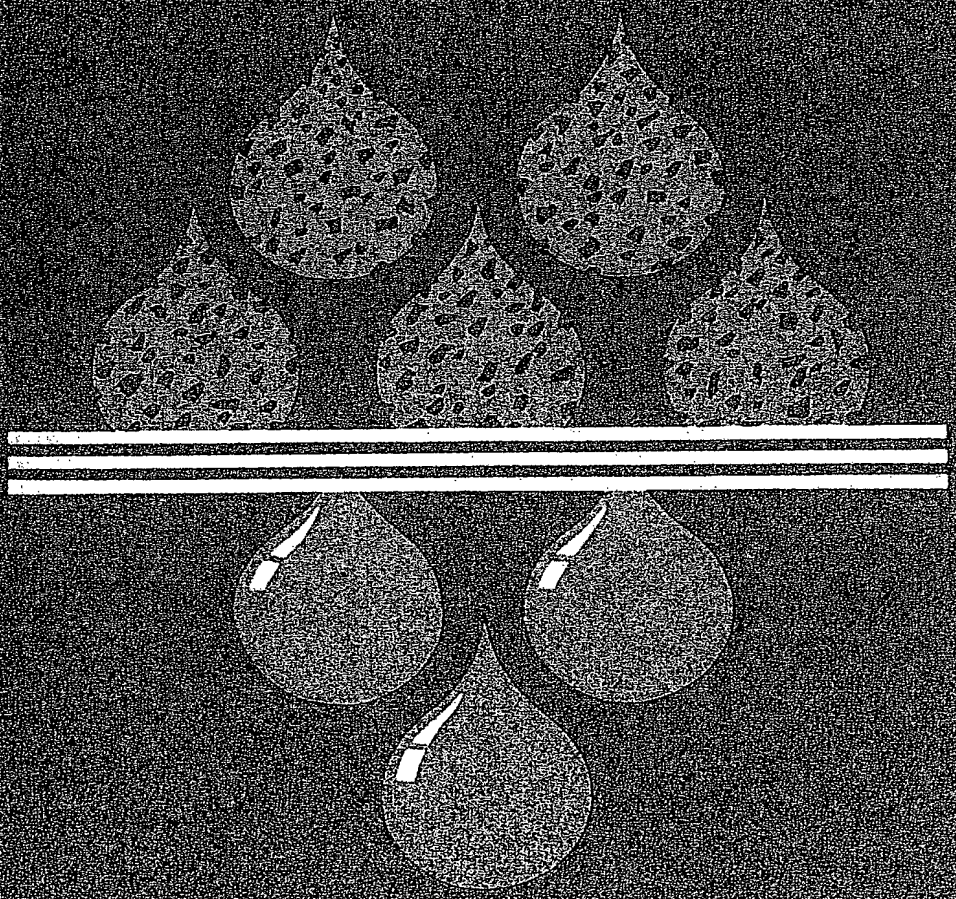

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Solid/Liquid Separation Technology

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Filter Media

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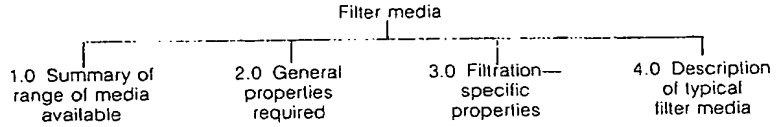
STRUCTURE OF THIS CHAPTER



1.0 THE RANGE OF MEDIA AVAILABLE

The heart of any filter is the medium: unless it is fitted with an adequate medium, in fact, even the most ingenious filter is useless. Before embarking on a consideration of the vast number of different types of filter, it is desirable

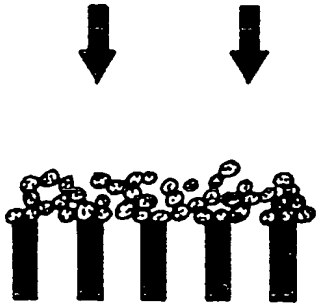


Fig. 3.5 Cake filtration mechanism.[50]

On the other hand, it is important to realise that the fluid being handled can have a major effect upon the degree of filtration achieved with a given medium. For example, whereas a fine sintered metal will remove particles as small as 0.4 microns from a gas, in the case of a liquid, the same sintered metal will not be effective below about 2 microns. Differences in performance are also likely to occur between aqueous and organic liquids, resulting from their different electrical properties influencing the build-up of electrostatic charges on the medium.

Table 3.6. Filtration Mechanisms and Practical Applications

Mechanism	Application	
	Solids recovery	Clarification
(1) surface straining	(X)	X
(2) depth straining		X
(3) depth filtration		X
(4) cake filtration	X	(X)

Special mention should be made of the mechanism which commonly occurs with woven fabrics. In many instances a new or clean fabric, when used to filter either a gas or a liquid, will allow some of the solid particles to pass through it for a period of time. A clear filtrate is not obtained until the characteristics of the fabric have been altered by solid particles embedding themselves between and within the individual yarns. Once this initial 'depth filtration' has occurred, surface filtration proceeds. In a somewhat similar way, the characteristics of many other media are altered by the initial deposit of solids on the surface, thus in effect giving a less open medium; this mechanism is, of course, deliberately exploited in the precoat type of filter.

The practical effects of the differences in the structure of filter media, combined with the mechanism of filtration, are well illustrated in Fig. 3.6, which shows the filtering efficiencies of felt and wire gauze when handling

particles of increasing size. It will be seen that both media have a cut-off point of 35 microns, above which size they stop 100% of the particles. The effectiveness of wire gauze, however, falls away rapidly as the particles become smaller, since it functions as a surface medium. By contrast, felt continues to perform reasonably well down to a much smaller size, by virtue of its depth filtration characteristics.

3.1.3 *Measurement Techniques and Interpretation*

As already pointed out above, there is frequently a distinct difference between the pore size and the size of the smallest particle which a medium can

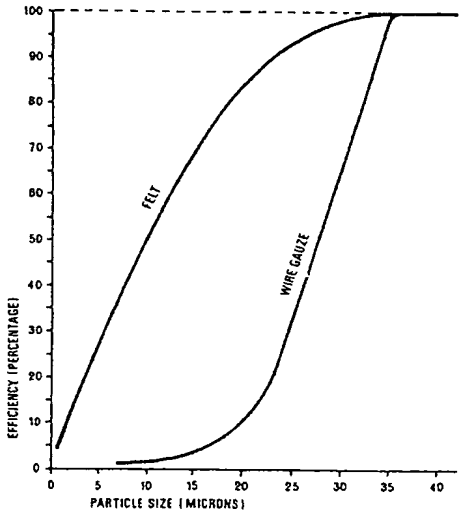


Fig. 3.6 Two media (felt and woven wire) with the same cut-off point.

stop. Nevertheless, there is obviously some relationship between these two dimensions in many instances, so that where possible, it is usual practice to define the pore size. Where the geometry of the medium allows it, this can be done by direct measurement, for example under a microscope. With the majority of media, however, other methods have to be used, to measure either an equivalent pore size (the bubble point test) or a particle retention size (by filtration tests).

3.1.3.1 *Equivalent pore diameter*

Uniform circular pores occur only with perforated metal sheet, whether produced by mechanical processes such as drilling or stamping, or by sophisticated processes such as photo-etching or electrodeposition. The fact that, nonetheless, media pores are frequently characterised by a single micron